

## REMARKS

The Examiner's rejection is essentially over the Callol et al Patent No. 6,749,628. Applicants request reconsideration based on the amendments to the independent claims and the following observations and comments.

Applicants thank the Examiner for the telephone interview with their attorney on December 7, 2007; which in part led to these amendments.

An important feature of Applicants' design is the limitation "a linear engagement member extending longitudinally within said sidewall of said tube ...". This limitation has now been clarified by adding the phrase: "without extending into the lumen of said tube," The Examiner has suggested that a claim limitation clarification such as this should adequately distinguish over the Callol '628 patent reference.

Applicants' catheter design is to be used for dialysis purposes. In dialysis, maximum blood flow rates are important in order to minimize the duration of each treatment. If the linear engagement member 26 were disposed within the lumen of the tube, it would have a deleterious effect on the catheter as a dialysis catheter for two related reasons.

It would reduce blood flow rates, thus lengthening the time for dialysis. It would also tend to interfere with laminar blood flow and increase whatever turbulence exists. Turbulent flow is a source of thrombus buildup. Thrombus buildup not only lengthens the dialysis sessions but also increases the risk of infection. When there is thrombus buildup, the catheter has to be removed and replaced.

Applicants respectfully submit that the Callol '628 patent teaches placing the joining wire 536 within the guide wire lumen. This is shown in FIG. 59 and made explicit at column 1, line 29 which states that the "joining wire 536 occupies minimal space in the guide wire lumen 538"... .

For this reason, Applicants suggest that the claims in this case are patentable over the Callol '628 teachings.

The purpose of the Callol catheter and the purpose of Applicants' catheter are essentially different in ways that relate directly to this structural distinction. Callol is directed to a short term catheter which is removed once its function is completed. Applicants' design is directed to a long term indwelling catheter, as is used in dialysis, in which it is important to maximize the time between removal and replacement of the catheter.

In addition, there are significant functional and structural differences, which are set out in the claims, between Callol and Applicants' design.

Applicants claim that the tube and companion member are in contact with "one another at surfaces thereof along a predetermined zone". This contact is maintained throughout use of Applicants' catheter.

Applicants would point out that in Callol, the only contact that may occur is between two balloons (this is suggested in FIGs. 51 through 58). The nature of the distinction between these two contacts is highlighted in Applicants' claims which state that the withdrawal of the linear engagement member permits withdrawal of the tube and companion member separately from one another.

With respect to Callol '628, the joining wire 536 is withdrawn so as to permit the separate placement of the two balloon catheters; as may be seen in FIG. 39. Thus, Applicants' linear engagement member 26 is withdrawn to permit removal of catheters and Callol's joining member 536 is removed in order to permit separate placement of the two portions of the joined catheter. Applicants' claims state that withdrawal of the linear engagement member causes the tube and companion member to

disconnect and permit separate, independent withdrawal of the tube and the companion member.

A third point of distinction is the fact that the proximal most end of Applicant's linear engagement member 26 is "embedded" in the sidewall of the tube. This embedding means that it cannot be accessed or withdrawn until the indwelling long term catheter is to be removed and replaced. The linear engagement member 26 becomes accessible only when the proximal end of the catheter is cut open to permit access. By contrast in Callol, the proximal end of the joining wire 536 is locked into place by a locking mechanism (column 41, line 25). There is no teaching in Callol of the embedding of the proximal end of the joining wire. This embedding is important as a fail-safe matter to make sure that the linear engagement member is accessed only when a long term indwelling catheter is to be removed. The Callol design requires that the joining wire 536 be removed during the process of insertion and placement. This means that the proximal end of this joining wire 536 has to be made accessible (presumably through removal of the locking hub) in order to initiate the procedure.

## Summary

Applicants suggest that these three distinctive structural features are no way made obvious by the Callol teachings, in large part, because the purposes of the two catheters are so different. There is nothing in Callol to suggest those different structures because there is nothing in Callol that addresses the problems or functions that Applicants' address.

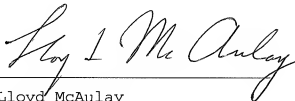
The teachings of Callol run counter to the teachings of Applicants because: (a) Callol needs as small a diameter catheter as possible and thus wants to use the guide wire lumen for the joining wire 536, (b) Callol pulls out the joining wire 536 in order to place the stents at a bifurcated body lumen, and (c) Callol wants ready access to the proximal end of the joining member because Callol wants to withdraw the joining member in order to properly position the stent structure.

Accordingly, Applicants believe that the claims in this case are in condition for allowance and such is respectfully requested.

If the Examiner feels that any of the above items warrant further discussion or if the Examiner has any suggestions as to claim language, a phone call from the Examiner would be appreciated.

The Commissioner For Patents is hereby authorized to charge any additional fees to Deposit Account No: 50-1529.

Respectfully submitted,



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